| Table C1: Population growth and mortality rates in Paris \& France, 1872-1937 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (thousands) | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |  |  |
|  | Total population $\mathrm{N}_{\mathrm{t}}{ }^{0+}$ | Adult population (20-yr+) <br> $\mathrm{N}_{\mathrm{t}}$ | Adult population growth rate <br> $n_{t}$ | Share 0-19-yr-old in total population | Average age of adult population | Adult decedents $\mathrm{N}_{\mathrm{dt}}$ | Adult mortality rate $m_{t}=N_{\mathrm{dt}} / \mathrm{N}_{\mathrm{t}}$ | Average age of decedents |  |  |
|  | Paris |  |  |  |  |  |  |  | Paris share in France |  |
|  |  |  |  |  |  |  |  |  | $\mathrm{N}_{\mathrm{t}}$ (pop.) | $\mathrm{N}_{\mathrm{dt}}$ (dec.) |
| 1832 | 938 | 656 |  | 30\% | 37.4 |  |  |  | 3.3\% |  |
| 1872 | 1848 | 1346 | 1.8\% | 27\% | 39.6 | 24 | 1.8\% | 49.2 | 5.8\% | 4.9\% |
| 1882 | 2269 | 1652 | 0.5\% | 27\% | 39.6 | 35 | 2.1\% | 50.1 | 6.3\% | 6.4\% |
| 1912 | 2838 | 2117 | 1.1\% | 25\% | 39.7 | 37 | 1.7\% | 54.2 | 8.1\% | 6.7\% |
| 1922 | 2841 | 2188 | 0.3\% | 23\% | 40.9 | 33 | 1.5\% | 56.6 | 8.2\% | 5.8\% |
| 1927 | 2801 | 2183 | 0.0\% | 22\% | 40.8 | 32 | 1.5\% | 57.6 | 7.8\% | 5.7\% |
| 1932 | 2782 | 2203 | 0.2\% | 21\% | 41.4 | 32 | 1.4\% | 58.7 | 7.6\% | 5.7\% |
| 1937 | 2768 | 2204 | 0.0\% | 20\% | 42.3 | 30 | 1.4\% | 59.3 | 7.7\% | 5.4\% |
| 1952 | 2851 | 2270 | 0.2\% | 20\% |  |  |  |  | 7.7\% |  |
| 1992 | 2126 | 1693 | -0.7\% | 20\% |  |  |  |  | 4.1\% |  |
| France |  |  |  |  |  |  |  |  |  |  |
| 1832 | 32696 | 19770 |  | 40\% | 42.0 | 437 | 2.2\% | 56.8 |  |  |
| 1872 | 36376 | 23132 | 0.4\% | 36\% | 43.5 | 499 | 2.2\% | 59.3 |  |  |
| 1882 | 37477 | 23964 | 0.1\% | 36\% | 43.8 | 525 | 2.2\% | 60.0 |  |  |
| 1912 | 39229 | 26110 | 0.3\% | 33\% | 43.9 | 545 | 2.1\% | 60.8 |  |  |
| 1922 | 38978 | 26810 | 0.3\% | 31\% | 44.7 | 573 | 2.1\% | 62.4 |  |  |
| 1927 | 40404 | 28087 | 0.9\% | 30\% | 44.3 | 561 | 2.0\% | 62.6 |  |  |
| 1932 | 41261 | 28880 | 0.6\% | 30\% | 44.4 | 561 | 1.9\% | 62.9 |  |  |
| 1937 | 41198 | 28657 | -0.2\% | 30\% | 45.1 | 556 | 1.9\% | 63.6 |  |  |
| 1952 | 42301 | 29447 | 0.2\% | 30\% | 46.1 | 474 | 1.6\% | 68.0 |  |  |
| 1992 | 57111 | 41637 | 0.9\% | 27\% | 46.9 | 511 | 1.2\% | 72.7 |  |  |

Source: Authors computations using censuses and Etat-civil data (see other demographic tables and formulas for more details)

| Table C2: Population by age group in Paris (male + female) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] |
| (thousands) | Total | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1832 | 938 | 138 | 145 | 241 | 183 | 113 | 60 | 37 | 17 | 3 |
| 1872 | 1848 | 242 | 261 | 400 | 358 | 278 | 174 | 91 | 38 | 7 |
| 1882 | 2269 | 297 | 320 | 491 | 439 | 342 | 214 | 112 | 46 | 8 |
| 1912 | 2838 | 327 | 393 | 632 | 571 | 417 | 274 | 148 | 63 | 14 |
| 1922 | 2841 | 263 | 390 | 569 | 580 | 466 | 310 | 176 | 71 | 16 |
| 1927 | 2801 | 265 | 352 | 606 | 546 | 452 | 310 | 179 | 73 | 17 |
| 1932 | 2782 | 290 | 288 | 583 | 550 | 452 | 329 | 190 | 82 | 18 |
| 1937 | 2768 | 277 | 287 | 509 | 580 | 454 | 343 | 204 | 93 | 21 |
| 1952 | 2851 |  |  |  |  |  |  |  |  |  |
| 1992 | 2126 |  |  |  |  |  |  |  |  |  |
| Source: Authors' computations using Paris censuses (see DemoVivantsParis.xls and formulas) |  |  |  |  |  |  |  |  |  |  |
| 1832: Kuagbenou-Biraben |  |  |  |  |  |  |  |  |  |  |
| 1872: Loua 1873 |  |  |  |  |  |  |  |  |  |  |
| 1882: total from DemoVivantsParis.xls; age distribution = linear interpolation (see formulas) |  |  |  |  |  |  |  |  |  |  |
| 1912: ASVP 1911 pp.724-725 |  |  |  |  |  |  |  |  |  |  |
| 1922: ASVP 1921 p. 297 |  |  |  |  |  |  |  |  |  |  |
| 1927: ASVP 1926 p. 437 |  |  |  |  |  |  |  |  |  |  |
| 1932: ASVP 1931 p. 297 |  |  |  |  |  |  |  |  |  |  |
| 1937: ASVP 1936 p. 437 |  |  |  |  |  |  |  |  |  |  |


| Table C3: Population by age group in France (male + female) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] |
| housands | Total | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1832 | 32696 | 7036 | 5890 | 5343 | 4676 | 3786 | 2864 | 1907 | 969 | 226 |
| 1872 | 36376 | 7070 | 6174 | 5615 | 5097 | 4570 | 3592 | 2631 | 1334 | 293 |
| 1882 | 37477 | 7009 | 6504 | 5746 | 5169 | 4606 | 3931 | 2759 | 1425 | 328 |
| 1912 | 39229 | 6595 | 6524 | 6165 | 5884 | 4946 | 4081 | 3044 | 1594 | 397 |
| 1922 | 38978 | 5376 | 6792 | 5964 | 5523 | 5442 | 4434 | 3268 | 1746 | 433 |
| 1927 | 40404 | 6163 | 6155 | 6749 | 5669 | 5328 | 4658 | 3442 | 1782 | 459 |
| 1932 | 41261 | 6913 | 5468 | 6771 | 6174 | 5259 | 4812 | 3492 | 1884 | 487 |
| 1937 | 41198 | 6439 | 6102 | 5928 | 6567 | 5251 | 4684 | 3678 | 2022 | 526 |
| 1952 | 42301 | 7135 | 5719 | 6445 | 4994 | 6071 | 5081 | 3794 | 2391 | 670 |
| 1992 | 57111 | 7575 | 7899 | 8591 | 8572 | 7619 | 5724 | 5603 | 3322 | 2205 |
| Source: Authors computations using national censuses (see Piketty 2010, Appendix C, and formulas) |  |  |  |  |  |  |  |  |  |  |


| Table C4: Decedents by age group in Paris (male + female) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] |
| (thousands) | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1832 |  |  |  |  |  |  |  |  |  |
| 1872 24 |  |  | 4 | 4 | 4 | 4 | 4 | 3 | 1 |
| 1882 35 |  |  | 6 | 6 | 6 | 6 | 6 | 4 | 2 |
| 1912 37 |  |  | 4 | 5 | 6 | 7 | 7 | 6 | 3 |
| 1922 33 |  |  | 3 | 4 | 5 | 6 | 7 | 6 | 3 |
| 1927 32 |  |  | 3 | 3 | 4 | 6 | 7 | 6 | 3 |
| 1932 32 |  |  | 2 | 3 | 4 | 6 | 7 | 6 | 3 |
| 1937 30 |  |  | 2 | 3 | 4 | 5 | 6 | 6 | 4 |
| $\begin{aligned} & 1952 \\ & 1092 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| Source: Paris Etat-Civil data (as published in Annuaire Statistique de la Ville de Paris (ASVP), see DemoMortsParis.xls) More precisely: the total number of decedents reported on this table was taken directly from Etat-Civil tables (decedents aged 20 -year-old and over, including decedents with unknown age and morgue decedents); the breakdown by age group was taken from the micro samples (divided by full sample response rate $x$ age response rate, so as to ensure consistency between the total and the sum; see formulas); the micro samples are themselves based upon Etat-Civil age tables (in the sense that the numbers of zero-wealth decedents by decennial age group were computed as residuals) Note: The total number of 20-year-old-+ decedents reported in Etat-civil tables for 1882 appears to me surprisingly high (namely, 36 790); here we took the 1879-1885 average (namely, 34 932) (see DemoMortsParis.xls). This revised number might also plausibly be somewhat too high (Paris mortality rate appears to rise between 1872 and 1882, see Table C1; and average per decedent wealth appears to decline, see Table A3). |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |


| Table C5: Decedents by age group in France (male + female) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] |
| (thousands) | Total | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1832 | 789 | 314 | 39 | 51 | 49 | 51 | 63 | 86 | 91 | 45 |
| 1872 | 833 | 295 | 39 | 45 | 46 | 55 | 71 | 96 | 130 | 56 |
| 1882 | 833 | 270 | 38 | 44 | 46 | 55 | 78 | 101 | 139 | 63 |
| 1912 | 697 | 129 | 23 | 40 | 46 | 55 | 76 | 116 | 140 | 71 |
| 1922 | 692 | 98 | 22 | 36 | 38 | 55 | 79 | 122 | 157 | 85 |
| 1927 | 680 | 98 | 21 | 38 | 36 | 50 | 77 | 121 | 151 | 89 |
| 1932 | 664 | 87 | 15 | 33 | 36 | 48 | 81 | 122 | 152 | 89 |
| 1937 | 633 | 64 | 13 | 26 | 38 | 47 | 76 | 123 | 156 | 91 |
| 1952 | 525 | 47 | 4 | 10 | 13 | 33 | 59 | 98 | 155 | 107 |
| 1992 | 522 | 7 | 3 | 9 | 14 | 23 | 39 | 80 | 111 | 235 |
| Source: National Etat-civil data (see Piketty 2010, Appendix C, and formulas) |  |  |  |  |  |  |  |  |  |  |


| Average wealth at death as a fraction of average wealth of decedents aged 50-to-59 year-old (raw data) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1872 | 2\% | 8\% | 19\% | 29\% | 78\% | 100\% | 211\% | 250\% | 301\% |
| 1882 | 2\% | 8\% | 12\% | 21\% | 50\% | 100\% | 157\% | 241\% | 385\% |
| 1912 | 2\% | 8\% | 13\% | 23\% | 48\% | 100\% | 215\% | 263\% | 376\% |
| 1922 | 4\% | 10\% | 26\% | 37\% | 75\% | 100\% | 174\% | 328\% | 368\% |
| 1927 | 2\% | 8\% | 13\% | 26\% | 51\% | 100\% | 129\% | 131\% | 191\% |
| 1932 | 1\% | 7\% | 24\% | 36\% | 53\% | 100\% | 169\% | 270\% | 291\% |
| 1937 | 1\% | 7\% | 25\% | 40\% | 76\% | 100\% | 167\% | 240\% | 297\% |
| Source: Authors' computations using the micro samples (see Appendix B, Table B6; see formulas) Note: Raw wealth ratios for 40-to-49 age group were smoothed for years 1882 and 1937, due to the abnormally high levels and standard errors observed for these two years (see formulas and Table B6) |  |  |  |  |  |  |  |  |  |


| Table C7: Corrected age-wealth profiles $\mathrm{w}_{\mathrm{t}}(\mathrm{a})$ in Paris, 1872-1937 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Differential mortality parameters by age group |  |  |  |  |  |  |  |  |  |
|  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| diffmort $_{\text {t }}(\mathrm{a})$ | 200\% | 200\% | 200\% | 200\% | 200\% | 180\% | 150\% | 130\% | 110\% |
| $\mathrm{m}_{t}{ }^{\text {P }}(\mathrm{a}) / \mathrm{m}_{\mathrm{t}}(\mathrm{a})$ | 133\% | 133\% | 133\% | 133\% | 133\% | 129\% | 120\% | 113\% | 105\% |
| $m_{t}{ }^{R}(a) / m_{t}(a)$ | 67\% | 67\% | 67\% | 67\% | 67\% | 71\% | 80\% | 87\% | 95\% |
| sharepoor $_{\text {t }}(\mathrm{a})$ | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| $\mathrm{w}_{\mathrm{dt}}(\mathrm{a}) / \mathrm{w}_{\mathrm{t}}(\mathrm{a})$ | 67\% | 67\% | 67\% | 67\% | 67\% | 72\% | 80\% | 87\% | 95\% |
| $\mathrm{w}_{\mathrm{t}}(\mathrm{a}) / \mathrm{w}_{\mathrm{dt}}(\mathrm{a})$ | 149\% | 149\% | 149\% | 149\% | 149\% | 139\% | 124\% | 115\% | 105\% |
| Average wealth as a fraction of average wealth of individuals aged 50-to-59 year-old (among the living, after differential mortality correction) |  |  |  |  |  |  |  |  |  |
|  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1872 | 2\% | 9\% | 20\% | 31\% | 84\% | 100\% | 189\% | 206\% | 228\% |
| 1882 | 2\% | 9\% | 13\% | 22\% | 54\% | 100\% | 141\% | 199\% | 291\% |
| 1912 | 2\% | 9\% | 14\% | 24\% | 51\% | 100\% | 193\% | 217\% | 284\% |
| 1922 | 4\% | 11\% | 27\% | 40\% | 80\% | 100\% | 156\% | 271\% | 278\% |
| 1927 | 2\% | 9\% | 14\% | 28\% | 55\% | 100\% | 115\% | 108\% | 144\% |
| 1932 | 1\% | 7\% | 26\% | 39\% | 57\% | 100\% | 152\% | 223\% | 220\% |
| 1937 | 1\% | 7\% | 26\% | 42\% | 81\% | 100\% | 150\% | 198\% | 224\% |
| \% of living individuals with wealth >0 (after differential mortality correction) |  |  |  |  |  |  |  |  |  |
|  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| 1872 |  |  | 18\% | 31\% | 43\% | 43\% | 48\% | 46\% | 49\% |
| 1882 |  |  | 15\% | 26\% | 36\% | 40\% | 41\% | 42\% | 49\% |
| 1912 |  |  | 23\% | 34\% | 41\% | 43\% | 40\% | 36\% | 35\% |
| 1922 |  |  | 20\% | 36\% | 48\% | 51\% | 47\% | 41\% | 36\% |
| 1927 |  |  | 21\% | 38\% | 47\% | 51\% | 46\% | 36\% | 32\% |
| 1932 |  |  | 30\% | 38\% | 52\% | 55\% | 54\% | 47\% | 40\% |
| 1937 |  |  | 34\% | 45\% | 53\% | 59\% | 57\% | 53\% | 44\% |
| Source: Authors' computations using age-wealth profiles (see previous tables and formulas; for more details, see Piketty (2010, Appendix B2)) |  |  |  |  |  |  |  |  |  |


| Table C8: Computation of $\mu_{\mathrm{t}}$ and $\mu_{\mathrm{t}}{ }^{*}$ ratios in Paris, 1872-1937 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] |
|  | Uniform mortality estimates |  |  |  |  | Differential mortality estimates |  |  |  |  | Final series |  | $\begin{aligned} & \text { Ratio } \\ & w_{t}^{50.59} \\ & w_{t}{ }^{20+} \end{aligned}$ | $\left\|\begin{array}{c} \text { Ratio } \\ w_{t}^{50-59} / w_{t} \end{array}\right\|$ |
|  | $\mu_{t}{ }^{0+}$ | $\mu_{t}^{20+}$ | cf ${ }_{\text {t }}$ | $\mathrm{B}^{20+} / \mathrm{B}_{\mathrm{t}}$ | $\mathrm{W}_{\mathrm{t}}^{20+} / \mathrm{W}$ | $\mu_{\mathrm{t}}{ }^{0+}$ | $\mu_{t}^{20+}$ |  | $\mathrm{B}_{\mathrm{t}}{ }^{20+} / \mathrm{B}_{\mathrm{t}}$ | $\mathrm{W}_{\mathrm{t}}{ }^{20+} \mathrm{W}$ | $\begin{array}{cc} \mu_{\mathrm{t}}= & \mu_{\mathrm{t}}^{*}= \\ \mathrm{cf}_{\mathrm{t}} \mu_{\mathrm{t}}^{20+} & \left(1+\mathrm{v}_{\mathrm{t}}\right) \mu_{\mathrm{t}} \end{array}$ |  |  |  |
| 1872 | 235\% | 177\% | 97\% | 100\% | 97\% | 172\% | 129\% | 97\% | 100\% | 97\% | 125\% | 155\% | 134\% | 130\% |
| 1882 | 260\% | 196\% | 96\% | 100\% | 96\% | 191\% | 145\% | 96\% | 100\% | 96\% | 139\% | 170\% | 165\% | 159\% |
| 1912 | 312\% | 240\% | 97\% | 100\% | 97\% | 233\% | 180\% | 97\% | 100\% | 97\% | 174\% | 208\% | 150\% | 145\% |
| 1922 | 277\% | 220\% | 97\% | 100\% | 97\% | 203\% | 162\% | 97\% | 100\% | 97\% | 157\% | 196\% | 128\% | 124\% |
| 1927 | 241\% | 193\% | 97\% | 100\% | 97\% | 176\% | 141\% | 97\% | 100\% | 97\% | 137\% | 171\% | 187\% | 181\% |
| 1932 | 269\% | 216\% | 98\% | 100\% | 98\% | 199\% | 160\% | 98\% | 100\% | 98\% | 158\% | 197\% | 144\% | 141\% |
| 1937 | 252\% | 203\% | 99\% | 100\% | 99\% | 186\% | 150\% | 99\% | 100\% | 99\% | 148\% | 185\% | 136\% | 134\% |
| Source: Authors' computations using age-wealth profiles (see previous tables and formulas; for more details, see Piketty (2010, Appendix B2)) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Differential mortality parameters by age group |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| diffmort ${ }_{\text {( }}(\mathrm{a})$ | 500\% | 500\% | 400\% | 300\% | 200\% | 150\% | 110\% |
| $\mathrm{m}_{\mathrm{t}}^{\mathrm{P}}(\mathrm{a}) / \mathrm{m}_{\mathrm{t}}(\mathrm{a})$ | 167\% | 167\% | 160\% | 150\% | 133\% | 120\% | 105\% |
| $m_{t}^{R}(\mathrm{a}) / \mathrm{m}_{\mathrm{t}}(\mathrm{a})$ | 33\% | 33\% | 40\% | 50\% | 67\% | 80\% | 95\% |
| $\mathrm{m}_{\mathrm{t}}(\mathrm{a})$ (1912) | 0.6\% | 0.9\% | 1.4\% | 2.5\% | 4.4\% | 9.2\% | 19.8\% |
| initial cohort size | 10000 | 9405 | 8547 | 7333 | 5525 | 3083 | 241 |
| poor decedents | 495 | 716 | 971 | 1356 | 1628 | 1705 | 121 |
| rich decedents | 99 | 143 | 243 | 452 | 814 | 1137 | 121 |
| total decedents | 595 | 859 | 1214 | 1808 | 2442 | 2842 | 241 |
| final cohort size | 9405 | 8547 | 7333 | 5525 | 3083 | 241 | 0 |
| average age at death (poor) | 57.1 |  |  |  |  |  |  |
| average age at death (rich) | 63.6 | 6.5 |  |  |  |  |  |
| average age at death (total) | 59.1 |  |  |  |  |  |  |
| Source: Authors' computations using various differential mortality profiles (see previous tables and formulas) |  |  |  |  |  |  |  |

